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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,290	01/31/2002	Peter Rex Gawthrop	10541/193	2033

757 7590 02/26/2003

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EXAMINER

ALI, MOHAMMAD M

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,290

Applicant(s)

GAWTHROP ET AL.

Examiner

Mohammad M Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

The restriction requirements have been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1-8, 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paquet (5,894,885) in view of Beatenbough (4,972,683). Paquet discloses a condenser comprising a top manifold/tubular wall 4 defining a first volume of space, a bottom manifold/tubular wall 4 positioned below the top manifold, a core positioned between the top manifold and the bottom manifold, the core comprising first set of condenser tubes (the tubes chambers 6 and 9) that are in fluid communication with the top manifold and the bottom manifold, a second set of condenser tubes (tubes between chambers 7 and 10) that are in fluid communication between the top manifold and the bottom manifold. Paquet discloses the invention substantially as claimed as stated

above. See Fig. 2. However, Paquet does not disclose volumes of different magnitude space for the manifolds. Beatenbough teaches the use of volumes of different magnitude spaces for the manifolds/headers 34 and 36 in an automotive condenser 32 for the purpose of holding more liquid refrigerant. See Fig. 2 and col. 3, lines 25-38.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the condenser of Paquet in view of Beatenbough such that manifolds of different in volume space could be provided in order to have more space to hold more liquid refrigerant. Regarding claim 8 for having a depressin on the bottom manifold is an obvious choice of the individual skilled in the art since there is no criticality or unexpected result from it.

2. Claims 9-15, 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paquet in view of Beatenbough as applied to claim 1 above and further in view of Poles et al. (6,200,542B1). Paquet in view of Beatenbough discloses the invention substantially as claimed as stated above. However, Paquet in view of Beatenbough does not disclose a radiator and an engine. Poles et al. teach the use of a radiator 16 and an engine 28 in an automotive air conditioning system for the purpose of having a cooling system of desired manner. See Fig. 1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the condenser of Paquet in view of Beatenbough and further in view of Poles et al. such that a radiator along with automotive engine could be provided in order to have a desired cooling system in the vehicle.

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3. Claims 25, 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paquet in view of Poles et al. Paquet discloses the invention substantially as claimed as stated above. However, Paquet does not disclose a radiator and an engine. Poles et al. teach the use of a radiator 16 and an engine 28 in an automotive air conditioning system for the purpose of having a cooling system of desired manner. See Fig. 1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the condenser of Paquet in view of Poles et al. such that a radiator along with automotive engine could be provided in order to have a desired cooling system in the vehicle.

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paquet in view of Poles et al. as applied to claim 25 above and further in view of Beatenbough. Paquet in view of Poles et al. discloses the invention substantially as claimed as stated above. However, Paquet in view of Poles et al. does not disclose a cross-flow condenser. Beatenbough teaches the use of a cross-flow condenser 32 in an automotive air conditioning system for the purpose of having a cooling system of desired manner. See Fig. 1. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the condenser of Paquet in view of Poles et al. and further in view of Beatenbough such that a cross-flow condenser could be provided in order to have a desired cooling system in the vehicle.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat. # 6,260,379B1 to Manwill et al., # 6,360,560B1 to


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Whitlow et al., # 5,482,112 to Sasaki et al., # 5,813,249 to Matsuo et al., # 5,159,821 to Nakamura, # 6,374,632B1 to Nobuta et al., # 6,237,677B1 to Kent et al. and Japan # JP02001174104A to Manwill et al.

Any inquiry concerning this communication or earlier from the examiner should be directed to Mohammad M. Ali, whose telephone number is (703) 308-5032. The examiner can be reached from 6:10am to 5:50pm from Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel, can be reached at (703) 308-2597. The fax number for the organization where this application or proceeding is assigned is 703-308-7764 for regular communications and after-final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.


William E. Tapolcai
Primary Examiner
Art Unit 344


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February 4, 2003